REMARKS/ARGUMENTS

Favorable reconsideration of this application is requested in view of the amendments made above and the remarks that follow. A Request for Continued Examination, and a petition for a three (3) month extension of time, together with the applicable fees, accompany this amendment.

The present invention comprises a smart card and smart card authorization system that provide standardization through the use of a fixed data file structure on the card and an application program interface and middleware on the card and/or the authorization system that permits sharing data and/or value between a smart card issued to a user and a point of sale system in an entertainment, theater, restaurant, retail business or other venue, thereby allowing various multiple point-of-sale systems having middleware associated with the card file structure or other middleware on the card to recognize and access the smart card regardless of upper level user interfaces.

The smart card is utilized in a transaction system that includes at least one smart card authorization device, a communication interface, and a transaction verification server. The smart card authorization device interacts with a defined data file structure provided on a smart card of the type described above.

An application program interface or middleware utilizes a predefined set of commands to control the reading and writing of data to the card memory based on the defined data structure. A mechanism is provided for encrypting and decrypting on the fly data read from and written to said encrypted field. The predefined commands include a set of general commands, a set of read commands and a set of write commands.

The standardized fixed card file structure allows all point-of-sale systems to readily recognize, accept and reject the smart card of the invention, which ensures cross platform interoperability. If the smart card is accepted, the point-of-sale system can communicate with the smart card regardless of the upper level user interface.

<u>35 USC 102 REJECTIONS:</u>

The patent to Kawan (6,289,324) is directed to a system of accessing data in a hierarchy of three or more levels, wherein Kawan's invention is a means to automatically direct the user to a final level without having to negotiate through intervening levels. There is no mention or suggestion in Kawan of providing a standardized defined data file structure that functions to interact with a point-of-sale system regardless of the structure of the upper level interface. The system as described by Kawan <u>requires</u> a transaction authentication server to function. In contrast, authentication in the present invention is performed by the middleware at the reading and writing device or card, and the use of a transaction or database server is not required (but is optional). In Kawan, only a software application program is in the control of communicating through the user to a smart card. In contrast, the invention utilizes middleware such as APIs, OCXs, Active X controls, libraries, and DLLs that are independent but linked to a specific software application program that controls communication to the contents and files of the card. This difference permits many software application programs using the same middleware to communicate to the contents and files of the card in the present invention. Kawan does what all prior smart card software applications have done in the past, by pre-defining a set of general commands that read and write from the software application program. This is significantly different from the middleware approach in the present invention.

As now amended, independent claim 1 calls for a smart card having means for interfacing with many different point of sale systems and reader types, enabling data to be exchanged between the card and a reader regardless of the structure of an upper level user interface, said means including a memory with a defined data file structure comprising at least one read only field; at least one encrypted read/write field; and at least one non-encrypted read/write field. While Kawan may have a defined data structure including a read only field, an encrypted read/write field, and a non-encrypted field, it does not have any means for enabling it to interact with any point-of-sale system regardless of the structure of the upper level interface.

In order to anticipate a claim under 35 USC 102, the reference must possess <u>all</u> of the claimed elements. Accordingly, claim 1 as now amended can not be properly rejected in view of Kawan under 35 USC 102, and this ground of rejection should be withdrawn.

The patent to Deo (6,547,150) discloses a smart application development system that enables the "closed" nature of smart cards to be accessed for development of smart card applications and/or debugging of the card. The Deo system enables remote development of smart card applications without requiring an in-circuit emulator (ICS) as required in prior systems. To accomplish this, the smart card must have a smart card development interface (SCDI) and the computer system used to program the card must have a client development interface (CDI). There is no thought or suggestion in this patent of providing means on the card that enable it to interact with all point-of-sale systems regardless of the structure of an upper level user interface.

Claim 16 as now amended calls for a transaction system including a smart card having a memory with a fixed data structure, and at least one smart card reading and writing device or terminal, wherein at least one of said smart card and said reading and writing device or terminal has an application program interface that interfaces with middleware on at least one of said smart card and said reading and writing device or terminal, said middleware interfacing between a user software application program and the reading and writing device or terminal to control access and communication between the reading and writing device or terminal and the fixed data structure on the card regardless of the structure of an upper level user interface.

Deo does not have any means to control access and communication between the reading and writing device or terminal and the fixed data structure on the card regardless of the structure of an upper level user interface.

In order to anticipate a claim under 35 USC 102, the reference must possess <u>all</u> of the claimed elements. Accordingly, claim 16 as now amended can not be properly rejected in view of Deo under 35 USC 102, and this ground of rejection should be withdrawn.

Since independent claims 1 and 16 are not anticipated by Kawan and Deo, respectively, claims 2-4 and 17-21 dependent, respectively, therefrom also are not anticipated by these references.

35 USC 103 REJECTIONS:

Claims 2 and 4 stand rejected as obvious in view of Kawan modified by Griswold (6,629,591) under 35 USC 103(a). Kawan has been discussed above.

Griswold (6,629,591) is directed to a specific form factor, i.e., a coin-shaped token. Griswold specifically distinguishes his token from a conventional card. See Col. 2, lines 7-40, and Col. 4, lines 43-47. The token of Griswold is designed and intended for a single use application and does not anticipate multiple functions through the use of differing data storage. To function, the token of Griswold requires a custom computer or a dedicated device that is tied to a single application, reading device and software application. This differs from the present invention that comprises a smart card having specific fields that can be used with any point-of-sale system for a plurality of functions and data storage, regardless of the structure of the upper level interface. In Griswold, the data stored is all on the system and is not written to the token until the end of play. Col. 10, lines 23-24. The Griswold invention is intended for an entirely different purpose than the present invention, and a different physical use mechanism is employed, wherein the token is completely swallowed or held until play is terminated.

In the invention, a conventionally shaped smart card has means enabling it to be used with any point-of-sale system regardless of the structure of an upper level user interface. Separate and distinct fields are provided for value and for display and tickets, etc, whereby security is increased by being able to control access to these areas independently *vis-a-vis* deferring devices and applications.

It is submitted that there is no motivation or suggestion in either Kawan or Griswold of combining them to produce the invention claimed herein. Even if one were modified in view of the other as proposed in the Office Action, the claimed invention would not result.

To establish obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Even if Kawan and Griswold were combined as proposed in the Office Action, all the claimed limitations would not be met. Accordingly, rejection of claims 2 and 4, as now amended, in view of Kawan and Griswold under 35 USC 103 would be improper and should be withdrawn.

Similar arguments apply with respect to the rejection of claim 3 under 35 USC 103 as unpatentable over Kawan modified in view of Griswold, further modified in view of Carlisle (5,649,118). Kawan and Griswold have been discussed above. Carlisle was cited for its teaching of use of a log file. Applicant acknowledges that log files are old in the art. However, the claimed structure requires more than a log file, and the provision of a log file in Kawan in view of Carlisle would not produce the claimed invention, as discussed above. Accordingly, the rejection of claim 3 as unpatentable over Kawan modified by Griswold, further modified by Carlisle is improper and should be withdrawn.

Independent claim 5 is directed to a transaction system including at least one smart card authorization device, a communication interface, and a transaction verification server, wherein the smart card authorization device includes means for interacting with a defined data file structure provided on a smart card, said defined data file structure on said smart card including means for interfacing with many different point of sale systems and reader types, enabling data to be exchanged between the card and a reader regardless of the structure of an upper level user interface.

Claim 5 (prior to amendment herein) has been rejected under 35 USC 103 in view of Kawan modified by Deo.

As discussed above, neither Kawan nor Deo disclose or suggest a system in which a smart card has means enabling it to be used with any point-of-sale system regardless of the structure of the upper level user interface.

Accordingly, rejection of amended claim 5 under 35 USC 103 as unpatentable over Kawan in view of Deo would be improper, and this ground of rejection should be withdrawn.

Similar comments apply with respect to the rejection of claims 6, 10, 14 and 15.

Independent claim 10 is directed to a transaction system comprising at least one smart card including a memory with a defined data file structure, wherein said defined data file structure includes at least one read only field, at least one encrypted read/write field, and at least one non-encrypted read/write field, said defined data file structure including means for enabling said card to interface with many different point of sale systems and reader types, enabling data to be exchanged between the card and a reader regardless of the structure of an upper level user interface, and read/write means for reading and writing data to the memory of the smart card, wherein said read/write means includes an application program interface that utilizes a predefined set of commands to control the reading and writing of data to the memory card based on the defined data structure.

Neither Kawan nor Deo disclose or suggest the structure and function now claimed in claim 10.

Dependent claims 7, 9, 11 and 13 stand rejected under 35 USC 103 as unpatentable over Kawan in view of Deo, further in view of Griswold. As discussed above, these references do not teach or suggest the invention as now claimed in claims 5 and 10, parent to claims 7, 9, 11 and 13. Accordingly, these dependent claims should be allowable along with their parent claims.

Similar comments apply with respect to dependent claims 8 and 12. If their parent claims 5 and 10, respectively, distinguish over the prior art, then these dependent claims also distinguish.

Applicant acknowledges that smart cards commonly have separate data fields, but the present invention involves much more than just providing defined data fields on a smart card. In the present invention, means (including a fixed defined data field) is provided for enabling the card to interface with many different point-of-sale systems and reader types, enabling data to be exchanged between the card and a reader regardless of the structure of an upper level user interface. This concept simply is not taught in the prior art.

For the above reasons, it is believed that the claims as now amended are patentable and allowable.

Respectfully submitted,
Dennis H. Lambert & Associates

Dennis H. Lambert
Reg. No. 25,017

DHL:cal

Dennis H. Lambert & Associates
7000 View Park Drive
Burke, Virginia 22015
Tel: 703-451-1227
Fax: 703-451-1297